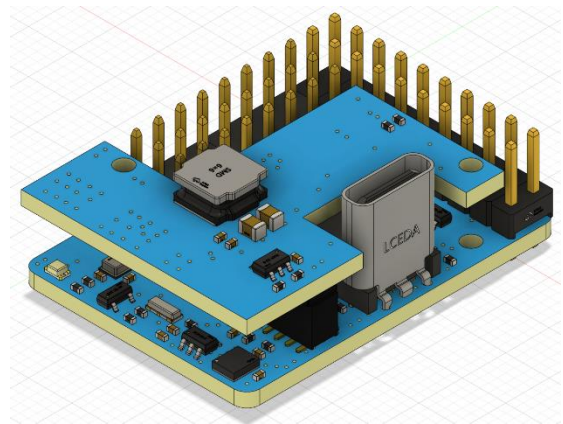# F411-NTE

FC Specifications

- MCU: 100MHz STM32F411CEU6
- IMU: BMI270 (SPI)
- Baro: SPL06-001 (I2C)
- OSD: AT7456E (SPI)
- Blackbox: No
- 2x Uarts
- 2x Full Softserial
- 6x PWM outputs (2x Motors, 4x Servos)
- 1x I2C
- 2x ADC (VBAT, Current)
- 2x LEDs for FC STATUS (Blue, Red)
- BEEP
- 1x RGB LED (WS2812)
- Built in inverter on UART2-RX for SBUS input
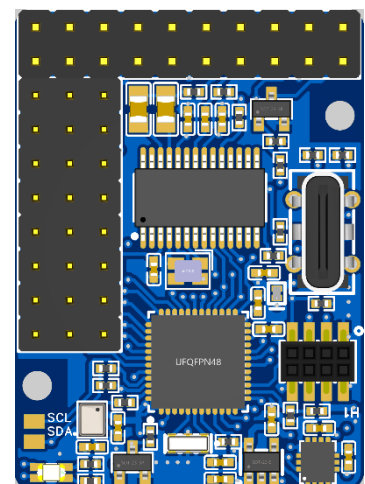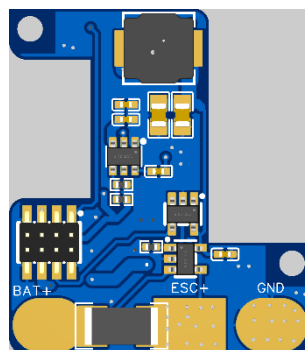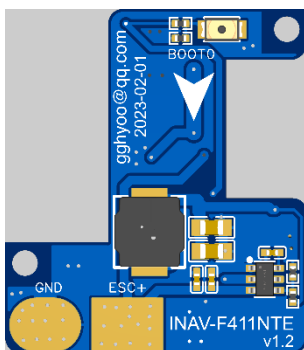- PPM receiver: not supported

Power

- 6~28V DC IN (2~6S LiPo)
- 50A Current Sense
- BEC 5V 3A for FC & Peripherals
- BEC S5V 3A for servos
- Vbat for VTX and camera
- LDO 3.3V 500mA
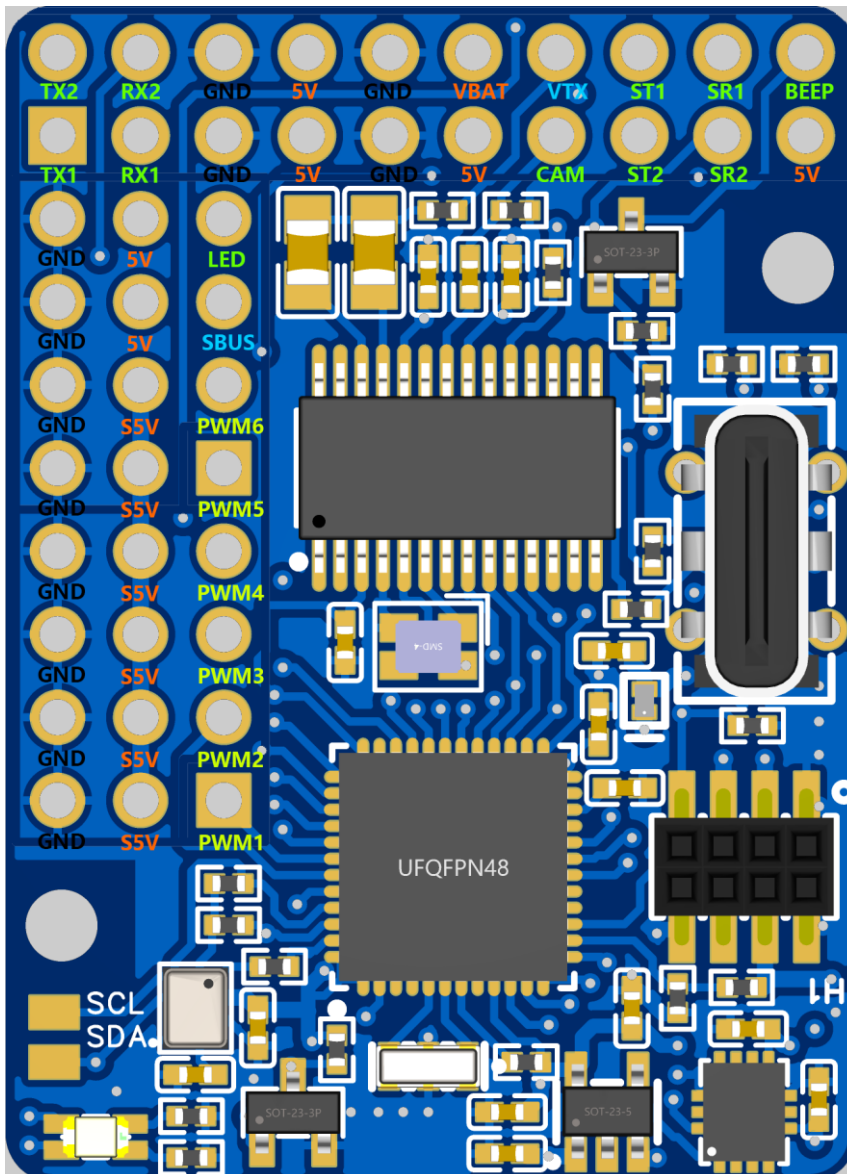- Battery Voltage Sensor: 1k:10k

FC Firmware

- INAV Target: MATEKF411NTE (INAV4.1 or newer, Use private FW)

Physical

- Dimensions: 36 x 26 x 12 mm
- Weight: 10g

Signals

5V: BEC 5V. Max. 3A
S5V: BED 5V. Max. 3A
VBAT: Battery voltage
GND: Power Ground

TX2/RX2: Uart2-TX / RX
SBUS: RX2 with inversion for SBUS input

TX1/RX1: Uart1-TX / RX

SCL/SDA: I2C bus for OLED, AirSpeed, Compass.

ST1/SR1: Softserial1_Tx/Rx
ST2/SR2: Softserial2_Tx/Rx
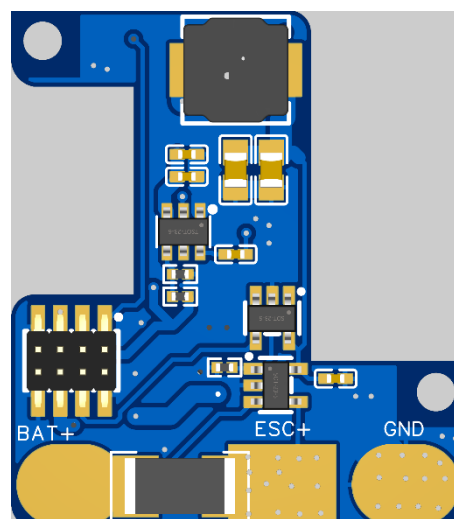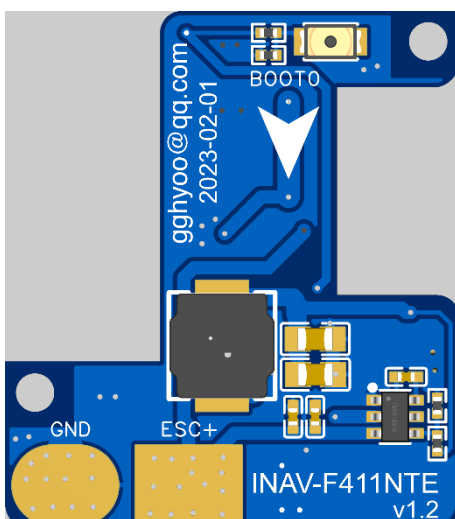*** Support GPS, DJI/AVATA/SA/TR VTX

VTX: Video out for video transmitter
CAM: Camera video IN

LED: WS2812 single output
BEEP: General active 5V buzzer

Button: DFU mode button

BAT+: Battery input **+**
ESC+: ESC input **+**
GND: Battery & ESC Ground